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PHLYCTENULAR OPHTHALMIA.

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What we may, for want of a better name, call phlyctenular ophthalmia, is among the most frequent of all the diseases of the eye. Of 4082 patients treated at Wills' Hospital last year, 193 were classified as conjunctivitis of this character, and 336 as keratitis of the same kind; making in all 529 cases, or 13 per cent. of the whole number. The disease is most often seen in children, and especially in young children, but even adults are by no means exempt from its assaults.

The essential feature of the malady consists of an eruption which makes its appearance upon some portion of the front of the eyeball. The eruption may comprise only one or more papules, vesicles, pustules or resultant ulcers. Or an ulcer may be healing on one portion of the eye while a papule or vesicle is declaring its presence on another. A papule may run through all the above mentioned stages to ulceration, or it may be cured in any one of them.

When the disorder is confined to the conjunctiva, it shows itself most often as a papule, about the size of a pin's head, seated on a circumscribed patch of inflamed mucous membrane, accompanied usually by a very slight general congestion of the conjunctiva, and by hyper-secretion of mucus. The ailment gives comparatively little inconvenience; there is mostly no intolerance of light, and the patient usually complains only of a feeling as of something in the eye. The use of the eye for near work, however, is apt to increase the congestion, and to cause, in a mild degree, all the symptoms of a case of ordinary conjunctivitis. Sometimes the affection appears as a vesicle or a small cluster of vesicles seated on the conjunctiva, and causes so little derangement that the attention is only called to it by a slight sensation as of a foreign body in the eye. These forms tend to spontaneous recovery in a week or ten days, either by absorption of the papule or by formation of a superficial ulcer, which quickly heals; but they are made troublesome by their liability to recurrence.

When that part of the conjunctiva which is close to the cornea is affected, the complaint shows a peculiar disposition to become chronic. I remember one case, that of a little girl, Hannah B., eight years of age, in which the quality of chronicity was very marked. When I first saw her she had been suffering from sore eyes for three or four years. Her mother said the eyes became almost well when frost came, but relapsed into the old condition with the first warm days of spring. She came to me in midsummer, and then the cornea in both eyes was completely surrounded by a ring of irregularly thickened and inflamed conjunctiva, almost stellate in outline, looking as if a string of papules had run together and lost most of their individuality, but still showed some signs of what they had been. There was no tendency here to the formation of vesicles or pustules, nor to ulceration. The cornea was perfectly clear, the eyes wide open, but became suffused and irritated upon use for near work. After a month of appropriate treatment the affection was quite cured, by the

gradual absorption and disappearance of the thickened ring of conjunctiva.

When the eruption occurs, as it often does, on the edge of the cornea, where it joins the sclerotic, the symptoms become more severe. In this case the papule, or vesicle, or pustule, is often very minute, and best seen with the aid of a good lens. Oftentimes there is a row of half a dozen or more such vesicles, set close together, like a string of beads, around the border of the cornea. In proportion to the size of the papule or vesicle will be the degree of pain, intolerance of light and lachrymation, and the amount of inflammation in the adjacent cornea and conjunctiva. If small they generally respond readily to treatment, and are cured in a week or two, in the same manner as those on the conjunctiva; but when large, and accompanied by much inflammation, they are often extremely obstinate.

When the eruption is seated entirely upon the cornea, the disease is exhibited in its most aggravated form. It is accompanied with great photophobia and spasmodic closure of the lids, and the attempt to open the eye is powerfully and involuntarily resisted by the orbicularis muscle. If the malady occurs in a small child, the best, and almost the only, way to obtain a view of the eye is to lay the little patient on its back, across the lap of a nurse or other person who will control its hands and feet, to take its head between your knees, and hold it there firmly while, in spite of its cries, with the tip of the forefinger, or with an elevator, you gently but steadily raise the upper lid. This proceeding is followed by a gush of tears, which momentarily obscures the picture; but when these have been absorbed by a bit of soft rag, the conjunctiva is to be seen deeply congested; the cornea partly opaque, traversed by enlarged vessels, and studded with one or more papules, or their sequelæ. The eruption is mostly situated in the superficial layers of the corneal tissue, but in bad or neglected cases, where there is much inflammation, the entire thickness is involved, and with ulceration perforation takes place, followed by loss of aqueous, prolapse or adhesion of the iris to the borders of the opening, and final cure only with the formation of a dense white cicatrix. In any case where the eruption goes on to ulceration the process of filling up the cavity is tedious, and a scar is left, which is more or less permanent. The secretions of the eye are very irritating, and soon cause excoriation of the skin about the borders of the lids, together with a crop of papules or pustules on the cheek or lids and side of the nose, and the irritation often extends, in an eczematous form, to the nasal orifices, the lips, and behind the ears. There is much ciliary pain, the patient becomes feverish, the urine dark red, the tongue coated, the appetite impaired and the sleep restless. Frequently the account of the case given by the mother is that the child lies with its face buried in a pillow all day long. In this, as in the preceding varieties, the eruption may abort at any stage, and disappear by absorption.

The disease under consideration is sometimes called herpetic ophthalmia, and the eruption does occasionally resemble that of herpes; but is, probably, more frequently unlike than like it. On account of the scrofulous appearance of the patient in some cases the name scrofulous ophthalmia is often adopted in describing the affection, but, judging from my own experience, the scrofulous aspect is a result of the malady, and does not precede it. The disease seems liable to occur in any person, and especially any child, who is subjected to improper hygienic conditions, either of dirt, air, clothing, surroundings, or even mental influences. Anything which has a tendency to lower the tone of the nervous system may produce it. The practice which prevails among the poorer classes, of giving their young children tea and coffee to drink, has, doubtless, a large share in the production of the disease. These stimulants, by their retarding effect upon tissue metamorphosis, to some extent replace and are substituted for proper and substantial nourishment. It will often be found, upon questioning the mother, that the child craves its tea and coffee more than any other article of its diet, and when instructions are given to abandon the use of these nervines altogether, and to substitute milk or water, the advice is often received with mingled signs of surprise and incredulity. Too long confinement to the house or school room, or rather, insufficient open air life, in weakly children, is another powerful factor in originating the disease. The absence of personal cleanliness, although no doubt contributing to the general result, is probably of less importance than some other causes. The dirt adherent to the cuticle, and which is being constantly thrown off by the exfoliation of the epidermis, has less effect on the health of the individual than the dirt which comes in contact with absorbent mucous membranes. If dirt is merely matter in the wrong place, then every drop of tea or coffee which goes into the stomach of a young child, and every breath of impure, dust or spore or morbific vapor-laden air which

the child draws into its lungs, is dirt in its worst sense. Dirt on the outside is offensive enough, but that on the inside means possibly disease or death to the individual.

In well developed cases of this affection there is little difficulty in diagnosis. The fully marked papule, pustule or vesicle somewhere on the orbital surface places the matter beyond the possibility of a doubt. But often, when the cornea alone is involved, we see the case first in the stage of ulceration. Then we will generally get the clew to its real nature by observing the localized character of the accompanying congestion, the excoriation of the lids and the eruption on the cheek. Sometimes we encounter an inflamed and hazy cornea, and a congested conjunctiva, which proves refractory to treatment, until the appearance of a circumscribed patch of inflamed conjunctiva or cornea, falling short of a papule, with a leash of vessels leading up to it, discloses the real nature of the difficulty.

The treatment of the disease varies much, according to the position of the eruption. When this is seated upon the conjunctiva almost any irritant or astringent suffices for its speedy cure. Indeed, its tendency is to get well very shortly, of itself. Of the remedies which have been recommended for its cure, the insufflation of calomel, the instillation of collyria of tannin (gr. viij ad f. ℥j.), of nitrate of silver (gr. ss ad f. ℥j), of corrosive sublimate, (gr. ¼ ad f. ℥j), and ointments of the red and yellow oxide of mercury, (gr. j-ij ad ℥j.), are the most in favor. When seated upon the cornea, however, the resources of the ophthalmologist are frequently tried to the utmost before a cure is accomplished. The first indication in this case is to relieve the intense irritability of the eye, and this may usually be accomplished by the instillation of a drop of a solution of sulphate of atropia (gr. j ad f. ℥j) every three or four hours. After each application it is necessary to lay a small piece of soft, white rag over the closed lids, to fill up the orbital cavity, even with the brow, with cotton wool, and to apply over all a well-fitting bandage with sufficient pressure to keep the inflamed organ at rest. As soon as the irritability and photophobia are relieved the bandage may be omitted, and a shade or a pair of smoked glasses worn. In case the excessive irritability is not relieved by the atropia, a brisk mercurial purge may be given, and if the inflammatory symptoms are severe, a few leeches may be applied to the temple, and the patient enjoined to remain in bed for twenty-four hours. Fomentations for half an hour, night and morning, with infusion of belladonna, often succeeds when atropia fails. The acetate of potassium may often be used advantageously, to relieve the febrile condition, and a Dover's powder at night, to allay restlessness. If after a few days of this treatment the affection shows no signs of abatement, it is best to proceed at once to open the anterior chamber. This should be done with a Graefe knife, not far from the corneal margin, and the incision should be parallel to the base of that corneal sector which includes the eruption. This operation gives immediate relief, both by removing the intra-ocular tension and by severing the main nerve fibres which proceed to the painful spot. In the worst cases, the commencement of the recovery usually dates from the moment of the performance of this operation. It should be done carefully, under ether, to avoid straining, and there will be no prolapse of the iris. To guard against the occurrence of this accident, as well as to facilitate the healing of the wound, the subsequent application of a retaining bandage will be necessary.

When the nervous irritability of the eye has been relieved by these measures, the photophobia will have mostly disappeared, and the organ can readily be examined. Then the application of a mild stimulant or astringent to the diseased spot will effect a cure. For this purpose the remedies above recommended in phlyctenula of the conjunctiva are well adapted. If the cornea has ulcerated, of course, time will be required to fill up the gap, and the process seems to be more tedious the nearer the centre of the organ is approached.

Unfortunately, the cure of the local eruption does not end the disease. The papules, vesicles, etc., tend to appear in new crops and new locations, to the disgust both of patient and physician, unless proper measures are taken to remedy the cause—the impaired nervous tone of the sufferer. I remember one case of this kind in a child, three years of age, whose parents, from motives of economy, lived over a stable in which the father had charge of the horses. In this case I battled with the disease for two months, with varying fortunes of partial victory and utter defeat, until at last I insisted upon the removal of the child to more salubrious lodgings. After this was done the case recovered at once, and has remained well ever since. Apart then from such improvement in diet and surroundings as would naturally suggest themselves to the medical adviser, it will be proper to administer quinine in tonic doses, syrup of the iodide of iron and cod-liver oil. Fowler's solution of

arsenic, in appropriate doses, is also useful in restoring tone to the nervous system, and local applications of the ointment of the oxide of zinc to the eruption in the skin is especially beneficial where there is much accompanying erythema, or the ointment of the yellow oxide of mercury if the tendency is to assume the pustular phase, with the formation of crusts.

1802 *Chestnut street, Philadelphia.*

A MODIFICATION OF DR. EMMET'S OPERATION FOR LACERATION OF THE CERVIX.

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Among the chief difficulties to be encountered by the uterine surgeon is that of inserting sutures within the vagina. The cutting necessary to be performed at times may be more formidable and exciting, but is very far from being as tedious as is the bloodless operation of inserting a few sutures; it comes at a time when the operator is fatigued with the operation just performed, and will often press upon his stock of patience until he has very little left, while protracted efforts in that direction are fully as fatiguing as is the holding of the femoral artery with the thumbs, during an amputation of the leg.

Especially is the above true of operations performed outside of a large hospital. Many times they must be performed in private practice (if performed at all) without professional assistance, as it is often next to impossible to get the patient's consent to the presence of any other doctor beside the operator. It is such cases as these which put a man upon his mettle; when he must depend upon himself, and himself alone. In a large hospital, where the surgeon has full control of his patients, and can call around him all the assistance he may require, it is quite another matter. Gentlemen who have operated under the above circumstances will appreciate, when they read this, its truth. Now it was just such difficulties as the above which led me to attempt to substitute something for the suture. The following is a short summary of my first attempt at substitution.

Mrs. ——, aged 30 years, presented the following train of symptoms when she applied to me for treatment. Her chief source of annoyance was the usual streaking, burning pains, upon both sides, in the hypogastric region, almost always met with in all cases of uterine or vaginal diseases. She menstruated irregularly, from once in two to once in six weeks, had leucorrhœa badly, and backache, pain in the bladder, etc. Upon making a vaginal examination the following conditions presented: Ostium vaginæ open, cervix slit up to the vaginal juncture upon both sides, and was further back than it should have been; the body of the uterus was about twice its normal size, and in a position of distinct anteflexion. The vagina was very voluminous in its upper portion, while the perineum and perineal body were both uninjured, which last condition was no doubt the reason that prolapse was not added to, or had not taken the place of, anteflexion. The abnormal conditions in this case, then, were four in number: First, sub-involution of the upper portion of the vagina; second, rupture of the cervix; third, sub-involution of the uterus, and fourth, displacement of that organ. The body of the uterus had been in a condition of sub-involution, without doubt, since her last confinement, eight years before (and it is a noticeable fact that, in nine cases of uterine disease out of ten, they date their beginning at some point in the parturient process), and this condition, unquestionably, was the cause of the flexion; the body of the uterus was soft and flabby, instead of being hard, firm and elastic, as that organ should be in health. Another, and the principal, cause was the lacerated cervix, which, being torn asunder upon both sides, to the vaginal juncture, no longer maintained that natural support which the normal uterine neck affords to the body of the uterus, and consequently, as there was a firm perineum and perineal body, and it could not sink down into the pelvis and become prolapsed, its increased weight displaced it in the direction of the least resistance, and it became anteflexed.

There were, then, four indications for treatment in this case, namely, restoration of the vagina immediately around the os uteri to its normal size, closing of the lacerated cervix, reduction of the displacement and retention, and lastly, to reduce its weight. Treatment was commenced by reducing the flexion with the uterine sound, after Sims' method; I then attempted to retain the uterus in position with the soft rubber and silver wire pessary, without first closing the torn cervix, but after a week's trial failed to do so. I believed I saw in that the reason of my failure, and determined to operate, but both the patient and her husband firmly refused to have any kind of an operation performed which would require the services of an assistant; so there was nothing to do but operate alone or let the case go, and have a failure passed up to my credit. I concluded to attempt the operation without assistance, except

such as could be rendered by non-professionals. Without administering an anæsthetic, I introduced a large-sized glass speculum, and with a pair of long and pointed dressing forceps held the torn lips of the cervix apart, and with a pair of slightly curved scissors freshened both edges of the laceration, also snipped off a portion of the superabundant and hypertrophied tissue of the everted lips; there was very little hemorrhage, and what little there was was almost entirely stopped upon the surface being touched with a sponge moistened in a solution of ferri persulphate. I then withdrew the glass speculum and introduced a bivalvular, and after penciling the vagina quite deeply with caustic, in its upper portion, that the cicatrix, in healing, might contract, and by doing so lessen the size of the dilated portion, I then attempted to introduce the stitches, and after persistent efforts of half an hour, with my unskilled assistants and unetherized patient, I was forced to cease, as my patient could no longer stand the pain produced; while trying to determine what to do, I noticed the pessary she had been wearing lying there, and it occurred to me that perhaps I might hold the gaping cervix together with the elastic ring. I put it on, and as it fitted the os nicely, it held the freshened edges together accurately, and I concluded to leave it there, at least for the present. I left off the external part of the supporter, *i. e.*, the belt and elastic tubes, and with instructions that the patient should be kept quiet, I administered an opiate, and left, feeling quite displeased with both myself and the results of my operation. I visited the patient the next day, with the intention of insisting upon having professional assistance to complete the operation. I found that the patient had rested well during the night, and had had very little pain at any time, and there had been no other bleeding than just a little oozing of bloody serum.

Upon making an examination with a speculum, I found that the edges of the wound were in perfect apposition, and that portions of it had the appearance of healing by first intention. I then concluded that nature was about to finish my unfinished operation, and that I had better not interfere. The only treatment I gave her from that time was to keep her bowels confined by the daily use of opium, while a tampon of cotton, saturated with glycerin, tannin and carbolic acid, was kept in the vagina, to be changed daily, and at the time of changing she was given half-gallon injections of water at 100° Fahr., which cleaned the vagina of all accumulated secretions; another effect of the warm water was to soothe the irritated parts and hasten the process of repair, which it unquestionably does to a greater extent than any other one agent.

She was kept in the recumbent position for a week, at the end of which perfect union had taken place. With the ordinary method of putting in stitches, my patient, in all probability, would not only not have been well at the end of one week, but that would have been a short time to have allowed the stitches to remain. At the end of two weeks union was so complete that the cicatrix could scarcely be discerned, leaving the os looking perfectly normal. The dilated position of the vagina was reduced to its natural size, as I had anticipated it would be, by the healing of the portion penciled with caustic.

The body of the uterus had also diminished in size, until it was nearly if not quite normal; of course, the administration of ergot had something to do with this last result, but I question if it would have been reduced in size with the ergot and without the operation; I believe both were necessary for the ultimate recovery of this patient.

I will mention only one case more, to illustrate the simplicity as well as benefits to be derived from this modification of Dr. Emmet's operation for "laceration of the cervix."

This lady, aged about thirty-five, mother of two children, one eight years old, the other about five, had suffered from endo-cervical leucorrhœa since the birth of her last child; had had frequent miscarriages, and had been suffering for three or four years with almost regular discharges of shreds of membranes at almost every menstrual epoch; the attending pain and extreme prostration was excessive during these exfoliations. The uterus was anteverted and slightly prolapsed; also much enlarged; the probe would enter to the depth of four inches, while a muco-purulent discharge was almost constantly escaping from the gaping, lacerated and slightly everted os, and the smell was so very offensive as to set at defiance the whole line of disinfectants. This woman's vagina was also considerably enlarged, and I could see no good reason why it should not be, for she had worn various self-retaining pessaries, some adjusted scientifically, but more adjusted unscientifically, for years (I removed from her vagina an Albert Smith pessary, almost large enough for a small horseshoe, and that was put in the vagina *wrong end up*), and one could scarcely wonder at her being disgusted with pessaries.

This patient had the usual weight in the pelvis, pain in the back, cervical and general neuralgia, hysteria, etc., almost universally met with in these cases.

After treating her for about two weeks with local applications of nitric acid to the everted os-uteri, with such internal medication as fluid extract ergot in half-teaspoonful doses three times a day, with only partial success, as the endo-cervical catarrh continued, though not so profuse as at first, I concluded to operate, as the best and quickest means of relieving the abnormal conditions.

In this lady's case the laceration was unilateral, instead of bilateral, as was the case with the first mentioned patient, hence the operation was much simplified. I proceeded, as in the first case, to pare off the everted and exuberant tissue, through a cylindrical glass speculum, with a pair of scissors, but instead of using a rubber ring to hold the freshened edges together, I used six of those little rubber loops found at the stationers, and used to hold the lids of memorandum books together, which I found to answer the purpose much better than a rubber ring, as I could put on enough of them to cover the whole uterine neck, thus making equitable pressure over the whole surface, and preventing constriction. In this case perfect union had taken place at the end of six days, and at the end of six weeks the endo-cervical catarrh had ceased, while at the end of two months the uterus was normal in size, and at her next menstrual period following the operation her membranous dysmenorrhœa was only very slight, and at her second had entirely gone, while it is now more than six months since she has passed any shreds of membrane. The after treatment was the same as in the first case, *i.e.*, large injections of water at 100° Fahr., followed by the packing of the vagina with lint saturated with glycerin, tannin and carbolic acid, with thirty-drop doses of fluid extract of ergot, to be given internally twice a day. This lady only kept her bed about forty-eight hours after the operation, and from that time until her complete recovery she was up and about the most of the time. After she had been up and about three or four days I adjusted a "soft rubber and silver wire supporter," to hold the enlarged and congested uterus in place; she only wore the support about a week when I removed it, the uterus being retained in position without its aid.

The advantages to be derived from this method of retaining the freshened edges together can be briefly stated. 1st. As about all the pain experienced during the operation is from the introduction of the sutures, if these sutures are not introduced there is very little pain, and hence, an anæsthetic may be dispensed with. 2d. If the patient is not etherized, it is not absolutely necessary to have professional assistance, and one can operate upon patients that would not listen to such a proposition if strange physicians were to be present. 3d. The parts are kept in just as close contact, and union takes place just as soon, allowing that no time is gained (which I believe there is). 4th. There is less danger of inflammation taking place in the parts. 5th. There are no stitches to remove. 6th. In slight cases patients may be operated upon at the office, and even without their knowing that they are undergoing any important operation, as they are not obliged to keep their beds a single day on account of it. These facts noted, and as has been hinted by some one writing or speaking upon this subject, many cases of ulceration of the os uteri (so considered), would be radically cured. I have cited but these two cases, to explain my method of procedure, and hope that I have been plain and explicit, or sufficiently so, for the reader to readily understand its accomplishment. My only excuse for writing this, I fear, tedious account of a very simple operation, must be the benefits to be derived from it. It has been said by eminent gynecologists, that laceration, to a greater or less degree, occurs in from 9 to 12 per cent. during confinement. Dr. Wm. Goodell, in a paper read before the State Medical Society of Pennsylvania, in 1878, estimated that one out of every six women with uterine disease had an ununited laceration of the cervix, while Dr. Paul F. Munde estimates 17 per cent. Now it seems to me that these estimates are pretty high, but if they are not very much too high, it behooves us, as practitioners, unto whom these women look for succor, to cast about us for the best, safest and simplest means for the relief of so prevalent an accident.

THE THERAPEUTIC VALUE OF THE ALKALINE CHLORATES.

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The members of the medical profession who have entered upon its duties within the last thirty years cannot realize the advantages they have in the treatment of diseases of the mouth and throat, and some of the infectious diseases, above those who practiced the profession prior to the time above named. Solid caustics, mineral acids, caustic solutions of chemical salts, brushes, probangs, and nauseating gargles, made up the

armamentarium of the physician to the middle of the present century. For some time before the meeting of the National Convention to revise the United States Pharmacopœia, in 1850, practitioners in various parts of the country had observed the properties of potassium chlorate in many inflammatory diseases of the mouth and throat, and the Convention had learned so much of its virtues as to justify them in giving it a place in the Pharmacopœia of that year (1850). Dr. Watson had used it in scarlet fever, as stated in his Practice of Medicine, published in 1843. Dr. George B. Wood refers to this use of it by Dr. Watson, in his second edition of his Practice of Medicine, published in 1849, but stated that he had no experience with it. Dr. Watson said, "I have remarked, in many instances, a speedy improvement of the tongue, which, from being furred, or brown and dry, has become cleaner and moist. This practice was suggested to me by Dr. Hunt, who tells me he has long employed it with advantage."

I well remember how a solution of this salt in twenty-four hours cured cases of stomatitis in children, and how inflammation of the fauces was successfully treated with it; how the affection of the throat, and the general symptoms of scarlet fever were controlled by it, and a great variety of diseases were treated with success. The medicine continues to be used, and has the confidence of the profession. In the treatment of diphtheria, we can truthfully say, it is employed by all who have published their methods of treatment, with quinia, iron, and the various remedies proposed for the treatment of this disease. I have observed that the most intelligent practitioners have abandoned the use of caustics.

"Turning from theoretical views to clinical experience, a large proportion, if not the great majority, of the practitioners of this country have been led to discontinue the cauterizing and irritating topical applications which have been heretofore in vogue, and to content themselves with soothing and antiseptic measures. So far as my own opportunities for observation enable me to judge, this practice is to be preferred. In the place, therefore, of a strong solution or the solid stick of the nitrate of silver, hydrochloric acid, the sulphate of copper, alum, and the astringent preparations of iron, applied repeatedly in the twenty-four hours, a gargle of a solution of the chlorate or nitrate of potassa may be employed" (Dr. Flint's "Practice of Medicine," page 1013).

"There can be no doubt, then, that the unfavorable results which have been attained on all sides by cauterizations, more or less energetically practiced, must put a stop to this procedure, even if in its stead we should be obliged to resort to the opposite, the purely expectant and symptomatic treatment" (Dr. Oertel, Ziemssen's "Cyclopædia of Medicine," vol. I, page 673).

A medicine which has been so well received by the profession, and which has been so useful in their hands, cannot cease to be employed, but no article of the materia medica is useful in all the cases of any particular disease in the treatment of which it has been found curative; but the question frequently occurs to the practitioner, must I not seek other remedies? With all its good properties, we doubt not those who have used the chlorate of potassium have found some inconvenience from its small solubility, it being the most insoluble of all the metallic chlorates, excepting the chlorate of the binoxide of mercury (Hg^2 O Clo^5), which is wholly insoluble in water.

One hundred parts of water at 0° C., dissolves only 3.33 parts of the potassium chlorate; at 13.32° or 56° Fahr., 5.60 parts; at 35.02° or 96° Fahr., 12.05 parts (Gay Lussac, quoted by Dr. F. H. Storer, Dictionary of Solubilities). Or one part is soluble in thirty parts of water at 0° C., and 8.33 parts at 35° C. (95° Fahr.) Gmelin's Handbook. *Ibid.*

The sodium chlorate, not yet officinal, possesses properties which make it much more easy of administration, and more active in all the cases in which the corresponding potassium salt is prescribed.

The solubility is much greater. One part of the anhydrous salt is soluble in .79 of water at 30°, and in .66 at 50°. (Kremer's Pogg. Ann., 92, 499. *Ibid.*) I find, by experiment, that it dissolves in a little more than its own weight of water, at 20° C. (69.8° F.), and at the same temperature the potassium chlorate requires sixteen times its own weight of water. Its solubility enables us to administer it in small doses of the vehicle to children, and the dose is not large for adults. When its general effects are desired, the solubility of the salt makes it more easy to be absorbed into the general system. This is true of the sodium compounds in general. I think it has been discovered that the system tolerates the continued use of sodium compounds longer than those of potassium. The soothing effects of sodium bicarbonate, as applied to burns, recently, is proof of its superiority to the compounds of the other alkali. Its greater solubility as a chlorate led me to its use soon after I

discovered this property of the salt, and while using the other chlorate I frequently met with cases which did not yield to the treatment by it, which were soon cured by the sodium salt. Such cases I meet with very often now, in which the domestic use of the potassium chlorate has not produced cures—cases which yield immediately to the other salt. I make use of it in all inflammations of the mouth and fauces, stomatitis, mercurial sore mouth, tonsillitis, the inflamed throat of scarlatina and diphtheria, administering a solution of twelve grams of the salt to a hundren and twenty-eight grams of water.

In scarlet fever I have used a solution of four grams to five hundred c.c. of water, as a wash to the surface, to the great comfort of the patient, relieving thereby the burning and itching so common in that disease and so greatly annoying. In the same way, externally, I have found it useful in a great variety of diseases; in the inflammation produced by the poison of rhus toxicodendron I have not found anything so effectual; applied on the first appearance of the inflammation I have arrested it; and when called to treat it at a later period, I have confined myself to its use, making a solution of eight to twelve grams of the salt to five hundred c.c, of water. I have patients who, as engineers, would hardly venture from home on professional business without sodium chlorate in their outfit, so effectual have they found it in the treatment of this troublesome inflammation. I employ a solution of from four to eight grams to a litre of water, in erysipelas, and for many years past it has been the only external application I have made use of. My patients speak of the comfort derived from the application of cloths saturated with this solution.

In conjunctivitis and the acute inflammation of the edges of the eyelids, it is the only wash I have employed for many years past—four grams to 500 c.c. of water.

Having observed the effects of the solution in diseases of the mucous surfaces, I made use of it in a case of purulent ophthalmia in an infant, and I was so much pleased with the result that I should not hesitate to rely upon its use in cases of this kind. I had a faithful and intelligent nurse, who obeyed my instructions to the letter. Several times during the day the eyeballs were washed by injecting the solution from a syringe, after which small pieces of linen were wet with it and kept constantly on the closed lids. The inflammation yielded soon to this treatment, and no spots could be discovered on the cornea, so common after the best treatment of this serious disease in young children.

In simple ulcers of the leg I now make use of no other remedy, and in cases of a more chronic character I have seen excellent results from this treatment; so also in hemorrhoids and inflammation about the anus; in inflammation of the meatus auditorius, of the nostrils and vagina, and the various inflammations of the scalp in children, several of which are classed under the common name of scald head. In these latter diseases I apply a cloth as a cap, saturated with the solution. The scales separate in a few days; and the surface heals under the use of the chlorate.

In short, I find the salt useful in the inflammations at the outlets of the mucous membrane, and all inflammations of the skin, and so general is its adaptations to these numerous affections, that I commend its use, and trust that the profession generally will come to appreciate its value, and a place be given to it in our National Pharmacopœia.

Hospital Reports.

PENNSYLVANIA HOSPITAL.

SERVICE OF DR. R. J. LEVIS.

REPORTED BY GEO. F. SOUWERS, M.D.

Skin Grafting.

One of the most recent additions to surgical resources is the operation of skin grafting. It is but a few years since a French surgeon first demonstrated the viability of very minute portions of skin when completely excised and transplanted. The simple procedure has now received a general appreciation, and found a wide range of usefulness. Its ordinary application is to the surface of chronic ulcers, in which healing in the usual concentric direction is sluggish, or has ceased; and it is applicable also to increase the cicatrization of all largely denuded surfaces, by producing centres for eccentric cutification. Besides extending the lines of cicatrizing edges, a physiological influence seems to be exerted, and the surface of an indolent ulcer is stimulated to renewed vital action by the presence of the grafts; even ulcers in which granulations have long ceased seem to be revived by these islands of promise. The utility of skin grafting has, in my observation, been in no instance better shown than in cases of extensive denudation caused by destruction of the skin, as in burns, and loss of large areas of integument from traumatic injuries. I have seen cases where large sloughs of the integument of the back, due to burns, have healed rapidly under the influence of a few skin grafts. It seems to me very probable that amputation, which, as a final resort in certain cases of extensive ulcers of the leg, is justified, may be substituted by this simple expedient. All of the conditions essential to successful skin grafting I

have not, after extended observation, fully determined. The most favorable condition for the development of the grafts is certainly that of healthy, active granulation of an ulcer, and the more nearly this state is approached the greater, as a rule, is the probability of success. It would sometimes seem that the grafts can best be taken from a corresponding portion of the body; thus, in grafting on the scalp, grafts from the scalp of the patient, or of some one else, should be employed. The same rule holds good in regard to the grafts used in plastic operations about the face. The transplanting of hard follicles has, I believe, failed uniformly.

That the influence of grafts in vitalizing the surface of chronic ulcers is very great, may be demonstrated by consecutively repeating the transplantations as the process of granulation becomes sluggish; each graft seems to excite a new healing impulse, as though it were a spur to reparation, and prevents the tendency to relapse into indolence until cicatrization is complete. Indeed, I am inclined to think that by perseverance in skin grafting there are few chronic ulcers, whatever may be their condition, which will not respond under this stimulus.

After extended loss of integument, resulting in disfigurement, deformity and impaired motion, the beneficial effects of skin grafting are very manifest. Observation would seem to demonstrate that where cutification is rapid, from a number of skin-forming centres, the resulting cicatrix is less violently contractile in its tendencies. Some operators have experienced disappointment in the grafting procedure, on account of the liability of the newly healed surfaces to a rapidly destructive ulceration under slight disturbing influences. I have seen a number of illustrations of the susceptible and readily perishable nature of the rapidly healed spaces; even a general feverish exacerbation that violently affects the patient may cause the delicate cicatrix to dissolve and disappear very rapidly. This delicacy and susceptibility of the newly formed tissue are merely incidental to its neoplastic character, and the practical lesson to be learned is the careful avoidance of local and constitutional influences that may destroy it. It is not absolutely essential that the surface of the ulcer be prepared for the reception of skin grafts; but the more nearly it is brought to a healthy, granulating condition the better the chance of success. As to the size and structure of the graft, it should consist merely of the simple structures of cuticle and derma, and should not contain any of the underlying fatty or connective tissues. It is not even essential that the derma be used in its whole thickness, as has been demonstrated by the fact that successful grafting has been effected by using mere scrapings of the cuticle, in which are contained some cells of the superficial or papillary layer of the derma; this method, though, is very uncertain and has no really practical merit. The graft should never, in diameter or thickness, exceed a fourth or a half line, such being ordinarily the depth of the true skin. The graft should be preferably taken from some portion of the patient's body, and from localities where the derma is thin and not densly covered with cuticle, as on most of the front of the body, and as a choice, from the inner surface of the arms and thighs. Grafts from other individuals, and even taken from limbs amputated for traumatic injuries, develop as readily as when taken from the patient's own body, but the risk of thus transmitting specific diseases forbids such experiments.

The operation may be performed by means of a delicate knife or scissors, cutting off minute particles to use immediately in transplanting, or large pieces may be removed and these subdivided into suitable sizes for the operation. The skin may be pinched up by means of a small forcep, and the piece snipped off with the curved ophthalmic scissors. The pieces should be about the size of a grain of canary seed, or a grain of rice. Dr. Hodgen, of St. Louis, has suggested a method for removing the graft, which is painless, simple, and convenient, and at the same time, very effective. It consists in merely penetrating the cuticle with a delicate sewing needle, elevating a small point, and shaving off the minute elevation of cuticle and upper stratum of derma, by means either of a very sharp knife or curved scissors. Blood need hardly ever be drawn in this operation, or, at most, a mere discoloration is perceptible. The graft is then immediately pushed from the point of the needle, and placed on the surface of the ulcer, as I now show you, care being taken to keep the epidermic surface upward. No incision should be made into the granulations in order to insert the graft; the blood thus exuded would be liable to elevate the graft from contact with the granulations. As simple adhesions of the graft is all that is desirable, I have sometimes, in cases of large and actively secreting surfaces, allowed them to be exposed to the desiccating influence of the atmosphere, so that the secretions should become viscid and thus hold the grafts securely in position. With the same object in view, I have allowed the ulcerated surfaces to remain uncovered, until the grafts became well agglutinated to them. All active medication to the ulcer should be avoided, and the surface merely covered with a light dressing, for protection from disturbing influences. A piece of muslin saturated with carbolized oil or cerate, or a piece of plain waxed paper, is all the dressing necessary. This dressing usually need not be removed for two or three days after the operation, unless secretion is profuse, when a stream of water may be allowed to run over it, sponging and wiping being carefully avoided.

One of the earliest changes noted in the graft, after the first few days, is the detachment of its cuticle, which may occasionally, by careful observation, be seen floating in the secretions of the ulcer, or by a slight touch it may be detached, leaving the true germinating material fixed in position. The graft, as it commences development as a germinal centre, becomes so blended and identified with the granulations as to be for a time almost lost sight of, its reappearance becoming evident in a bluish or lilac-tinted pellicle, which indicates the progress of cutification.

In regard to the size of grafts for transplanting, I have, in a number of instances, grafted by removing from recently amputated limbs pieces of

skin measuring one-third or one fourth of an inch square; but such large pieces are very likely to fail in retaining their vitality, and I have found small grafts to give much more satisfactory results. The number and position of the grafts will, of course, vary in accordance with the size of the ulcerated surface, and in large ulcers they may be distributed centrally and near the periphery. Those near the circumference will stretch their granulations outward and stimulate the borders of the ulcer to activity; and, with regard to the advantage of centrally located grafts, it will be well to remember their importance with reference to the difficulty often experienced in eventually healing the last of a chronic ulcer. A large ulcer, on which grafting has been successfully performed, will soon present islets, from which cicatrization progresses in directions of the nearest healing points, until all are joined by an interlacement of newly formed tissue.

EDITORIAL DEPARTMENT.

PERISCOPE.

How to Apply the Hot Water Vaginal Douche.

In the Chicago *Medical Gazette*, Dr. E. C. Dudley says—

The following is designed to impress the importance of strict observance of detail in the application of the douche, since in no other manner will its good effects be realized:—

Ordinary method of application.	*Proper method of application.*
I.	I.
Ordinarily the douche is applied with the patient in the sitting posture, so that the injected water cannot fill the vagina and bathe the cervix uteri, but on the contrary, returns along the tube of the syringe as fast as it flows in.	It should invariably be given with the patient lying on the back, with the shoulders low, the knees drawn up and the hips elevated on a bed pan, so that the outlet of the vagina may be above every part of it. Then the vagina will be kept continually overflowing while the douche is being given.
II.	II.
The patient is seldom impressed with the importance of regularity in its administration.	It should be given at least twice every day, morning and evening, and generally the length of each application should not be less than twenty minutes.
III.	III.
The temperature is ordinarily not specified or heeded.	The temperature should be as high as the patient can endure without distress. It may be increased from day to day, from 100° or 105° to 115° or 120° Fahr.
IV.	IV.
Ordinarily the patient abandons its use after a short time.	Its use, in the majority of cases, should be continued for months, at least, and sometimes for two or three years. Perseverance is of prime importance.

The sitting posture is especially objectionable, for another reason. It favors pelvic congestion by force of gravity, while the dorsal position utilizes this force during the application of the douche.

A satisfactory substitute for the bed pan may be made as follows: Place two chairs at the side of an ordinary bed, with space enough between them to admit the lower bucket; place a large pillow at the extreme side of the bed nearest the chairs, spread an ordinary rubber sheet over the pillow, so that one end of the sheet may fall into the bucket below, in the form of a trough. The douche may then be given with the patient's hips resting on the pillow and with one foot on each chair; the water will then find its way along the rubber trough into the bucket below.

Puerperal Hæmoptysis.

In two interesting clinical lectures reported in the *Union Médicale*, Nos. 94 and 96, Prof. Peter relates some cases which have occurred in his practice, of hæmoptysis occurring either during pregnancy, or after delivery, or while suckling. There is, in fact, a normal pulmonary plethora in these conditions, revealed by an increase of temperature to the extent of half a degree (C.) or more at the lower intercostal spaces. This pulmonic plethora may in some cases become transformed into pulmonary congestion or inflammatory action, but is independent of the presence of tubercles. Not only do these cases differ from tubercular hemorrhage by the absence of the signs of tuberculariza tion, but also, and principally, by the character of the sputa. These, indeed, may be of a bright red at first, but they speedily become of a blackish-red, and later even quite black. At first more or less large in size and distinct from each other, at a later period they are small in volume, and almost always of a slight abundance. Moreover, they are not accompanied by mucosities. In other words, they are such as are observed in pulmonary apoplexy, and, in fact, it is really a pulmonary apoplexy which gives rise to them. In typical cases of this kind there is a complete absence of fever, but in others there may be more or less fever, and even slight broncho-pulmonary inflammation. In treating such cases, according to whether fever is or is not present, mere expectation, or cupping, blistering, laxatives, and antimony, may be required.

Treatment of Internal Hemorrhoids by Hypodermic Medication.

Dr. George Ross gives this instructive case, in the *Southern Clinic*—

Miss B. has been a sufferer from internal bleeding hemorrhoids for nearly two years, at times enduring such agony as to contemplate suicide. She could not stand or walk without the protrusion of one or more tumors through the sphincter ani, and after stool, besides the painful and disagreeable necessity of replacing the everted rectum and mass of tumors, was obliged to lie down for a considerable length of time before she was equal to the demands of her vocation. She had suffered so long and acutely, and every agent which her medical adviser had suggested having so signally failed in affording the slightest relief, that in sheer desperation she took refuge in opium, chloral and whisky, unconsciously using such quantities that she became a prey to their power. Of ointments and lotions she had used endless quantities, and losing faith in all medical men, had relapsed into a stolid indifference. About the last of September an attack of inflamed hemorrhoids made her so desperate she consulted me. Upon examination, I decided at once to adopt the hypodermic method of medication. The bowels having been previously thoroughly emptied by enema, on the morning of the 4th of October I injected ten drops of carbolized oil (℥ix olive oil and ℥j cryst. carbolic acid) into the centre of *one* tumor, throwing the fluid in very slowly, and retaining the needle *in situ* until it could be thoroughly distributed through the tissues. The almost instant effect was the whitening and partial corrugation of the mucous membrane. I then injected alongside ¼ gr. sulph. morphia, replaced all the tumors above the internal sphincter muscle, and made my patient comfortable in bed. The operation was not very painful, but the pain increased considerably in two hours, apparently because of the incessant action of the "sphincter," and lasted an hour or two. To relieve this, as well as to assist in the absorption of the tumors, I directed the application, night and morning, of this ointment:—

℞. Iodoform,		℥j
Acidi carbolici,		
Acidi tannici,	āā	grs. xv
Ext. belladonnæ,		
Pulv. opii,	āā	grs. viij
Vaselinæ,		℥j

To guarantee a semi-solid stool, she took each morning, immediately before breakfast, a small wineglassful of Hunyadi Janos water. On the 11th of October I repeated the treatment, injecting *two* tumors, and omitting the morphine. The tumor originally injected was much diminished in size. On the 18th she was menstruating, so I was forced to postpone my injection until the 25th. At that time I could only find two tumors, and they so small that I should not have thought it necessary to do anything for them except upon the ground of making "assurance doubly sure." She declared herself perfectly well, so far as the piles were concerned, and said that she felt so entirely unlike her late self that she almost wondered whether she could really be the same individual. The third and last operation was almost painless; she did not lose a day from her school, and was equal to any amount of exercise during treatment, a thing absolutely impossible before.

Infantile Typhoid Fever.

This disease is described by Dr. Coleman, in the *Virginia Medical Monthly*—

He has seen the disease in children ranging from eighteen months to five years of age. It is marked by a daily double rise of temperature and corresponding remissions. Its critical days are the seventh and its multiple. The cutaneous abdominal eruption is much more common and marked than in the typhoid fever of adults. Besides, in the typhoid fever of children diarrhœa is absent; and it is this absence of a usually prominent symptom in adults that makes the disease more or less obscure in children. This absence of diarrhœa in the typhoid fever of children is due to the fact that in them, up to five or eight years of age, Peyer's glands are rudimentary, and therefore, do not suffer from the effects of the typhoid poison, as in the case of adults. It is a peculiar fact that the typhoid fever of old people simulates very much that of children, although it is not so wanting in risk. Dr. Coleman regards typhoid fever as contagious, but as less so than scarlet fever. He believes the true cause why typhoid fever is not more frequent among adults is, that they had the disease in childhood. "Masterly inactivity" is the principle required in treatment. A nervine now and then, mild diuretics and occasional enemata. As the child grows beyond five years of age the disease more and more resembles the fever as it affects adults; and by the age of ten years it loses almost entirely its distinctive infantile form. He has never seen a patient under ten years old die with typhoid fever, which favorable result, he thinks, is due to the undeveloped state of Peyer's glands.

Cream-puff Poisoning.

Dr. Henry Leffman writes to the Philadelphia *Medical Bulletin*:—

Articles of confectionery and fancy baking frequently produce marked irritation of the stomach, which irritation may extend into the alimentary canal. In most cases free vomiting or purgation relieves the symptoms, and after a brief condition of weakness the patient is quite restored. In a small percentage of these cases the trouble is more serious, symptoms indicating a remote effect occur, that is, the nervous system is more directly involved, and the condition is like that of true poisoning. Cream puffs, a well known article of fancy baking, seem to be especially liable to this action. I have had my attention directed to a number of instances. In one of these, about half a dozen persons who had eaten of these articles were seized, after an interval of about an hour, with violent symptoms like cholera morbus. In another instance, detailed to me by Professor DaCosta, two children were affected. In these the condition was one of prostration without marked signs of stomach

or intestinal irritation. A third instance occurred recently, and in this the choleraic character was marked and lasted several hours. I have made chemical examinations of portions of cream puffs that have caused trouble, but have not found anything that could be assigned as the cause of the action. In some shops the puffs are baked in copper pans, and it has been suggested that the metal may find its way into the crust, but in objection to this may be urged that the symptoms are not those of copper poisoning, that sufficient quantity could not be absorbed in this way, and lastly, that I have not found copper in those which I have examined. The possibility of the use of some of the imitation flavoring materials must be borne in mind. Nitro-benzole (see *Bulletin* for July, p. 50,) might be used as a substitute for bitter almonds. Bitter-almond oil often contains prussic acid, but this is very volatile and would soon be driven out in the baking. The treatment of cases of cream-puff poisoning must be directed to the symptoms. Opiates might be used to control the violent irritation, and vegetable astringents might also be given. Conditions of prostration must be met by supportive measures, warmth to extremities, and the usual methods. The prognosis appears to be quite favorable. All of the cases above referred to recovered.

First Successful Case of Cholecystotomy.

At the Royal Medical and Chirurgical Society, Mr. Lawson Tait recently reported the first successful case of this operation. The patient had been married eighteen years, had borne six children, and menstruation was normal and health good till the summer of 1878. At that time she had spasmodic pains in the right side, aggravated by walking and lifting any light weight. A swelling noticed in September slowly increased, and during last winter pain became more intense, and she presented a cachectic appearance, suffering from incessant headache, sickness and obstinate constipation. The seat of pain was over the right kidney, where there was a heart-shaped tumor, firm and elastic, without fluctuation, tender to the touch, and movable to each side. The urine gave only negative results. At a consultation with the author's colleague, Dr. Edginton, no decided diagnosis was attempted, and the opening of the abdomen was agreed upon, which was performed on August 23d, in the middle line, to the extent of four inches. The tumor was found to be a distended gall bladder, containing a white, starchy-looking fluid, and two large gall stones, one lying loose and the other impacted in the entrance of the duct and adherent to the mucous surface. The latter was removed after a tedious and very difficult operation (fully described in the paper). The stone and fragments weighed 6.11 grams. The wound in the gall bladder was stitched up to the upper end of the wound in the abdominal walls by continuous sutures, leaving the aperture into the bladder quite open, and closing the rest of the abdominal opening in the usual way. The operation was performed antiseptically, under ether. The patient rallied completely in a few hours, and the dressings of the wound were found stained with healthy bile. The flow of bile from the wound continued till September 3d. The wound was completely healed on September 9th, when the patient began to take solid food, up to that time the diet having been restricted to milk and beef tea. On the 30th she went home quite restored to health. A temperature chart indicated the evenness and rapidity of the recovery. An entire absence of symptoms of gall-stone rendered an accurate diagnosis impossible, but this was of less importance as late improvements in abdominal surgery made an early exploratory incision for ascertaining the true nature of the disease feasible. The author, in stating that he always used rigid antiseptic precautions in his abdominal sections, expressed some doubts as to his success being attributable in any way to them.

The Salicylates in Diarrhœa.

In the last volume of the St. Thomas Hospital *Reports*, Dr. Kilner reports experiments with the salicylates in diarrhœa. As the bismuth and calcium salts are reputed sedatives of the mucous membrane, these bases were selected, more especially as the salts they form with salicylic acid are bland and sweet, and have no irritating effect upon the throat during the swallowing of the medicine. Dr. Kilner, so far as he could trace out the results, found them almost uniformly favorable, but as he seems to have administered them only to out patients, he is not able to tabulate them. As he expected, he experienced chief benefit when the diarrhœa seemed to be entirely dependent on the heat of the weather:—

"It seems not improbable, in these cases, that the diarrhœa is an effort of nature to reduce the temperature of the body, the sweat glands being either incompetent or else not sufficiently active to perform the extra duty suddenly required of them. Here the salicylates not merely check the diarrhœa, but also cool the body by their influence on the sweat glands, assisted by the direct cooling action of the air upon the larger quantity of blood impelled through the cutaneous capillaries; and in addition, the stimulation of the glands does not terminate with the leaving off of the medicine, thus enabling the child to become accustomed to hot weather."

In another class of cases, when the diarrhœa is caused by improper food, the drug may be expected to be of use by arresting the decomposition or fermentation of substances in the alimentary canal; but when the intestinal derangement is secondary—being derived by reflex action from some other part, as occurs in the dentition of infants—no effect will be produced. During the exhibition of the salicylates for diarrhœa they give rise to two effects worthy of notice:—

"First, as long as the diarrhœa lasts the skin continues dry, or, at the most, regains its natural moisture; but this moisture varies inversely with the purging; nevertheless, even when the stools have become solid, there is rarely, if ever, much perspiration, although the same-sized doses, when given for most other illnesses, cause the child to be bathed with it. Secondly, he has never seen a case of diarrhœa in which the usual head symptoms of salicylic acid have shown

themselves, although with the same dose during other illnesses they have appeared."

He advises the salts to be given in good-sized doses—two or three grains for a child under six months, and from three to five, or more, when above that age.

Sulphite of Soda in Malarial Fevers.

Dr. L. Austin Porter says, in the *Michigan Medical News*—

I have been using sulphite of soda in many of the malarial fevers, which have been quite frequent in this neighborhood this fall. I find the results quite satisfactory, not a grain of quinine being necessary. It has appeared to me that cases thus treated are less subject to a relapse; the career of fever is cut perceptibly short, and convalescence immediately begins. I take the tongue of the patient as my guide board for the administration of this salt. When I find it presenting a broad, flabby appearance, with pale texture, and covered either with a pasty white, yellow, or brownish coat, with bad taste in mouth and fullness of stomach, sulphite of soda is my remedy; and with these signs I regard it as almost an infallible cure. But if the condition of the tongue be different from that here described, it will do more harm than good. It is absurd to administer it to a patient whose tongue is red, red-edged with fur in centre, or even covered with fur entire, while the body of it is red, or in which red papillæ are projecting up above the coating. There is nothing that will clean off the tongue quicker than this salt.

In properly selected cases it acts as a sedative, nervine, sudorific, and anodyne, bringing down the quick pulse, lessening irritability, cooling the burning skin, and soothing the aching body. My mode of giving this remedy is to use about sixty grains, divided into ten powders; one powder given every two hours, in mucilage, albumen or slippery elm tea.

New Method of Operating for Varicocele.

The *Virginia Medical Monthly* states that at a meeting of the Richmond Academy of Medicine Dr. Isaiah H. White reported the following case, in order to describe a new method of operating for varicocele: H. W., of the United States Navy, sought relief because of pain along the spermatic cord, and softening and atrophy of the testicle, due to varicocele. The operation was as follows:—

The vas deferens and spermatic artery being held aside, the scrotum is transfixed by a needle armed with a silk ligature, as in Ricord's operation—the one used in this case being a sewing-machine needle, which has the eye near the point. As the eye of the needle emerges through the counter puncture in the scrotum, the loop of silk is caught, and through it is passed a loop of catgut, which follows the needle during its withdrawal. One end of the gut is then drawn through and liberated from the loop of silk, leaving the catgut thus transfixing the scrotum behind the veins. The needle is again passed through the same puncture and counter puncture in front of the veins; one end of the catgut is caught in the loop of silk and drawn through as before. The veins are thus surrounded subcutaneously by a loop of the ligature, the free ends of which are left hanging out through the first puncture in the scrotum. The ligature is now tied, the ends cut short and returned into the scrotum and left to be absorbed. A similar ligature is then passed about an inch from the first.

At the end of three days the patient was walking about his room, the testicles being supported by a suspensory bandage. On the seventh day he returned to his ship, at which time everything seemed to be progressing favorably.

If future experience should demonstrate the success of this method, much will be gained in the time spent in waiting for the detachment of the ligatures in the other methods heretofore in vogue, which not infrequently amounted to several weeks.

Cold Baths in Typhoid Fever.

In the last volume of the St. Thomas Hospital *Reports*, Dr. Ord continues the subject of baths in hyperpyrexia, on which he published an instructive paper in last year's *Reports*. He now details ten cases of enteric fever in which the graduated bath was used, and two of which ended fatally. Notwithstanding this somewhat average death-rate, he is of opinion that the systematic employment of this kind of bath as early as the seventh or eighth day of fever is likely to contribute importantly to the reduction of mortality from enteric fever in hospitals. He sums up, most concisely, his observations, as follows:—

"That the graduated bath—reduced during a period of from twenty minutes to thirty minutes, from between 90° and 100° to 70° and 60° Fahr.—is a powerful agent in the reduction of febrile temperatures; that in enteric fever it is most efficient and most safely applied early in the disease; that it is not contra-indicated by intestinal, cerebral, or pulmonary complications, but, on the contrary, distinctly tends to check them; that it is contra-indicated by excessive feebleness or rapidity of the pulse, or by great exhaustion; that it is desirable in many cases of intense fever to use the bath more than once, in fact, to repeat it so long as the fever is unchecked, but not to repeat it at shorter intervals than twelve hours, an apparent revival of the temperature often subsiding after such a period."

The Cold Bath in Infantile Convulsions.

In the *Canada Medical Record*, November, 1879, Dr. T. K. Holmes observes—

In my own experience eighty per cent. of all cases of convulsions in children occur during fever, and I believe are nearly always caused by the elevation of temperature alone. The ordinary treatment of such cases is unsatisfactory: chloroform, first recommended by Sir James Simpson, will control the spasms, but in many cases these occur in such rapid succession that no intermission can be perceived; they continue whenever the anæsthetic is stopped, and our only recourse is to continue its administration until the fever yields to medicine or subsides spontaneously. I have followed out this plan of treatment in

many cases, often successfully, and frequently not so.

I have notes of four fatal cases in which the inhalation of chloroform was continued from six to thirty hours. The administration of medicine in these cases is always difficult, sometimes impossible, and is generally attempted with risk to the already weakened heart. This is true of bromide of potassium, chloral, veratrum, aconite, etc., while quinine acts too slowly to be depended upon in any severe case; warm or hot baths are sometimes useful, when, by inducing perspiration, they reduce the temperature, but every medical man knows that they often fail to arrest the convulsions.

The cold bath fails so seldom that it may be considered a specific. The spasms will frequently continue until the temperature has been reduced to 98½°, but at this point they are almost invariably arrested. Several years' experience with this plan of treatment has inspired me with the strongest confidence in its usefulness, and yet a desire not to have its value over-estimated compels me to admit that there are cases in which convulsions will return or continue notwithstanding the reduction of temperature, but such cases are rare, and probably are complicated by organic lesions, as tubercular meningitis.

A Case of Prolonged Gestation.

The following case is reported in the *American Journal of Obstetrics*, by Dr. E. N. Lewis, of Carver, Minn. :—

Mrs. D., aged thirty-four, married, and mother of four children. Menstruated on the 28th day of August, 1875; had connection with her husband second day thereafter; symptoms of pregnancy (morning sickness) manifesting themselves within ten days, there was no doubt that she was enceinte. Quickening took place at four and a half months, and everything being normal, she expected to be confined, at the furthest, in the early part of June. I contemplated visiting Philadelphia, but at her urgent request I remained to deliver her, and did remain until the 20th of June; then, there being no indication of labor, I started on my centennial visit, returning home on the 27th day of July. I found that she had not yet given birth to the child, nor did labor set in until the night of the eighth of August. Nothing unusual was encountered except a firmly ossified head, the fontanelles being firmly closed, though the head was small; no appearance of an over-developed fœtus existed. The labor was completed in six hours; mother and child both did well. Taking the date of last menstruation, to June 7th, 1876, would make 280 days, to August 8th, would make the time between menstruation and delivery 341 days.

Hypodermic Injection of Ether in Sciatica.

In the Cincinnati *Lancet and Clinic* Dr. Whittaker reports the following case, illustrative of this treatment in a case of sciatica which had resisted the ordinary treatment for that disease, such as quinia, hypodermic injections of morphia, iodide of potassium, arsenic, belladonna, wine of colchicum, electricity and counter irritation.

J. McG., married, thirty years of age, farmer, nervous temperament. Present condition emaciated, loss of appetite, loss of sleep, intense pain along the whole tract of the left sciatic nerve, and radiating upward from the exit of the nerve under the pyriformis muscle to the sacral and lumbar regions. Muscles of the leg and hip considerably atrophied; temperature much reduced, so much so that the patient complains of coldness and numbness. The system under the influence of morphia, which has been kept up about a month.

The morphia was immediately withdrawn and injections of ether commenced. First injection of fifteen minims immediately produced warmth and reduced the pain, and the patient slept soundly that night, for the first in two weeks. Afterward used five injections on the five days succeeding, one each day, averaging twenty-five minims each. Improvement continued steadily. Patient put on comp. phos. pil. and iron. Appetite immediately returned, sleep returned, use of leg gradually returned, muscular atrophy disappearing, and he is now well. No abscess formed, only slight callous forming around the puncture.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

EXCHANGES.

——The *North American Review*, now published monthly in New York city, is one of the most substantial periodicals in this country. The January number has an able presentation of his plan of an inter-oceanic canal, by M. De Lesseps, and an article on the metaphysics of science, by Prof. Whewell, which is worth the attentive study of every lover of positive science.

——The New York *Nation* is, beyond doubt, the leading literary critical journal of this country. Its editorials are always incisive, and its reviews of books generally fair; although the determined effort of the paper to be always and invariably right, and hence to admit no corrections, seems to us unnecessary nowadays.

——Lippincott's *Magazine* always has fresh and pleasant stories, excellent descriptive pieces, attractive wood cuts, and sufficient solid matter to make it suit all tastes in the household.

——The *Atlantic Monthly*, for January, appears on superior paper, with a list of first-class contributions from the most prominent writers of the country, especially New England. It will easily maintain the lead it has taken among journals of its class.

THE

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A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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THE OBJECTS OF TRUE PHYSICAL CULTURE.

Professor Goldwin Smith apparently likes to establish his authority as a critic by disparaging American institutions and habits. In a late article in the Princeton *Review* he has some not very sensible remarks on the plan and extent to which athletic sports are carried on at English and American colleges. He attributes them, in England, to the ennui of an aristocratic class, and in America to an imitation of England. He further complains that the direction which athletic sports take is not a useful one beyond its immediate effects, and that rowing a shell or walking against time are almost as little connected with anything useful as trundling a hoop. Leaving out of the question the unhealthy interest which is engendered in cruel and degrading forms of athletic exercise, such as the long-distance walking matches, the vulgarizing influence of the hero worship of coarse and ignorant athletics, and the gambling spirit which is manifested so forcibly at public exhibitions of sports, all of which are by him counted as drawbacks to the present exposition of athleticism, the system entirely lacks, he says, the useful purpose which might be given to it.

Now it might appropriately be remarked that these accessories are not at all necessary adjuncts to athletic exercise, and they are quite as much associated with elections, for example, and yet no one would, on that account, advocate the abolition of the right of suffrage.

But the great error in all this reasoning, that we would point out, is, that exercise, athletic sport, should be "hooked to some useful end;" that boys should be taught a trade to develop their muscles, or that the force expended in a gymnasium should somehow be utilized to run a lot of sewing machines. Nothing of the sort. Exercise, to be beneficial in the highest sense, should be for itself alone; it must not be work in any sense; it should pursue its own objects, and no other; it should be made a pleasure and not a labor; it should be utterly divorced from ulterior notions of economizing expended powers; and this should never more firmly be insisted on than in the case of those abnormal creatures who say they take no pleasure except in useful work.

The theory of scientific gymnastics is directed to bring about three qualities in the tissues.

1, Responsiveness; 2, Endurance; 3, Strength. The first of these is displayed in suppleness or agility. The muscle is well under the control of the will; it responds at once, with promptness and to the required extent. The quick blow of the prize fighter, the exactly graded and lightning-like motion of the swordsman, are examples. Not only is the nervous message transmitted from the central organ to the muscle with the utmost rapidity, but the contraction of the muscle is just so much and no more than the designed effect demands for its accomplishment. This is what we mean by *Responsiveness.*

Endurance is the capacity of repetition of the same act, the reiterated discharge of the same amount of nerve force to produce equal muscular contractions for an indefinite period. It is the "staying power" which the tissues must acquire in order to do their best work. It also means

the learning and adoption of the line of least muscular force to perform a given task. This is slowly acquired, but when once known, allows of the performance of apparently most onerous tasks with little effort.

Strength is the third, and, beyond a certain moderate amount, least important end of athletic training, although it is often put first. The utmost strength that it is possible for any one to acquire is strictly limited by conditions of age, height, weight and structure beyond the individual's control; nor is it at all necessary to develop the strength of muscles to their utmost in order to reach their utmost physical perfection. Quite the reverse, indeed, is the case.

To develop these three qualities of tissue wholly different methods of physical culture are required. They do not go hand in hand. The country lout with big muscles that can throw an ox has, as a rule, little endurance and less responsiveness. All army surgeons know how soon these big strong fellows will break down. The circus clown, agile as a cat, is often physically weak, and with no more endurance than an ordinary mortal.

Moreover, all three of these qualities are to be imparted to all the muscles of the body, in proportion to their uses, so that a symmetrical development may be secured. The blacksmith, with his mighty right arm, but who is "blown" in a foot race of a hundred yards, and the ballet dancer, with her legs like Diana's and her arms like pipe stems, are familiar examples of the absence of symmetry.

We cannot at this time, nor is it necessary to, explain the procedures which skilled teachers of gymnastics employ to secure the best results in their pupils; but enough has been said, we hope, to show that the wish to make this noble and beautiful art secondary to some or any utilitarian end is a foolish one, unworthy of any admirer of athletic sports, of any physician, of any sanitary reformer. Let it be pursued for itself alone; the fruit it yields is worthy of the toil, and it were unsound doctrine to ask for more.

Notes and Comments.

The Relation of Cryptogamous Growth to Malarial Poison.

In the Atlanta *Medical and Surgical Journal*, Dr. J. G. Westmoreland makes some noteworthy observations on this subject. He states that during the months of July and August, 1847, and in the same months of 1879, the greatest number of mushrooms were seen all over the uncultivated land of the forest near Atlanta. So abundant were they in both of the years referred to, that casual observers wondered at the immense number of "frog-stools" seen in the woods. The experience of 1847 gave Dr. W. good reason for predicting troublesome fever to follow the appearance of the large crop of cryptogams in 1879, and it has been signally verified.

He supposes the fever in question had its cause in the germs or sporules of the numerous cryptogams mentioned. It is known that the mushroom is the growth of a night and has the duration of a day. Falling down, the innumerable spores rise and are wafted by the breeze so as to infect the atmosphere in the neighborhood around. The fever coming on at a suitable time after the breaking down and drying of mushrooms, and assuming features different from typhoid and marsh-malarial fevers, he thinks the conclusion just, that there is something more than coincidence in these things.

A more probable suggestion would be that the same meteorological causes which led to the unusual growth of mushrooms favored also unusual development of the quite different organic growths which give rise to malarial fevers. In other words, the relation is one of coincidence, not of identity.

Dr. Howard's Method of Restoring Suspended Animation.

This method was recently investigated by a Committee of the Royal Medical and Chirurgical Society, of London.

The committee are of opinion that Dr. Howard's suggestions as to the following points are very valuable, and might be adopted with advantage: 1. The removal of fluid from the air passages and stomach. 2. The position of the head and trunk during the performance of artificial respiration. The more fully extended position of the head, as recommended in Dr. Howard's rules is preferable to that in the figure published by the Royal Humane Society, inasmuch as it secures greater patency of the superior aperture

of the larynx, and is less likely to offer any impediment to the ingress or egress of air.

One of the members, Mr. Hulke, said he had practiced both. Howard's plan was good in certain respects, especially with regard to the position of the tongue and chin, but on the whole, Sylvester's was better, more convenient, and sometimes more speedy.

The Tongue in Malarial Affections.

At the last meeting of the Medical Society of Delaware, Dr. Wm. Marshall exhibited some drawings showing a condition of tongue he believes pathognomonic of malaria. The middle of the tongue is coated with a dirty brown fur, which thins off toward the point, where the color of the papillæ can be seen pressing through the attenuated coating, while on the side of the fur there are clean, smooth, depressed margins, having a bright red color. The sides or edges of the tongue are flattened, pinkish, and traversed by sharp lines, creating the impression to the eye of the observer that the parts are crenulated, striated, corrugated, puckered or crimpled—either term having a shade of appropriateness—but which, upon close inspection, will be found situated in the substance of the tongue, leaving the mucous membrane even and smooth to both sight and touch.

[For similar suggestions on this subject see Hall's *Manual of Differential Diagnosis*, p. 45.]

Water Traveling as Inducing Abortion.

The people of Brazil, according to Dr. H. Lite, of San Mateo (St. Louis *Medical and Surgical Journal*), believe that abortion is readily induced by boat voyages. He says—

"Abortions are not rare. The people attach much importance to canoe passages as the cause, because some women have aborted after them. Be the cause either horseback traveling or canoe voyaging, abortion is very common here. I do not attach much importance to such alleged causes, and I believe that if the canoe voyages produce abortion, it is not by the physical impression that they do so, as the people believe. It is my opinion that it is sometimes the moral shock which women, naturally timid, suffer when they journey on the water, which is the most direct or the approximate cause of abortion in such circumstances."

In view of the frequency of trans-Atlantic voyages, it becomes an interesting question whether this "moral shock," together with the sea sickness, does not often lead to similar results.

Ether with Cod-liver Oil.

Years ago Dr. B. W. Foster, of Liverpool, recommended the combination of ether with cod-liver oil, as rendering the oil more palatable and more assimilable. It is mentioned in the first and all subsequent editions of *Napheys' Therapeutics*. A Committee of the New York Therapeutical Society appointed to investigate the subject reached the conclusions—

1. That the addition of ether to cod-liver oil in about the proportion of fifteen minims to each half ounce, or an equivalent amount of the compound spirit of ether, will succeed, in the vast majority of cases, in enabling the patient to take the oil, even though it previously disagreed.

2. That in some cases in which the oil still disagrees after the addition of the ether, the difficulty may be overcome by giving the ether separately, from fifteen minutes to half an hour after the oil is taken.

The Benzoate of Sodium.

The inhalation of the benzoate of sodium in phthisis continues to attract attention in Germany. Prof. Rokitansky, of Imspruck, was the first to advocate it, and Dr. Winternitz and others who have visited his clinic report upon it very favorably. They aver that nearly all cases improve upon it, at least at first. This result is categorically denied by many other observers.

Its success as an agent in diphtheria is attested by Dr. Letzerich, of Berlin. The pseudo-membrane is dusted with powdered benzoate, applied through a glass tube or quill, two or three times a day. Older children may use a gargle of one part to twenty. The temperature and pulse together decline under this treatment. The pseudo-membrane contracts and becomes thinner and more transparent.

Squire's Operation for Port-wine Nævus.

Mr. Squire has made what he deems some important improvements in his operation for nævus. He describes it as follows:—

At the first operation I divide the skin into small squares, by two series of parallel incisions, the one set crossed at right angles to the other, just as in my former method; but the incisions, instead of entering the skin perpendicularly, enter it slantingly. I may call the one series of parallel incisions longitudes, and the other cross series latitudes. At my first operation the obliquity of the longitudinal incisions is directed eastward, and that of the latitudinal ones southward. At the second operation, executed about a week afterward, the lines of longitude and

latitude are reëxecuted still in the same directions respectively, only that now the obliquity of the longitudinal incisions is directed westward, while that of the latitudinal ones is directed northward. In this way the obliteration of a port-wine mark may be effected in a fortnight, if the whole of the mark be operated on at once, although it may often be more convenient to treat the mark piecemeal. There are various little details special to this modification of the operation, which demand attention; but the above are the main features of the new process.

CORRESPONDENCE.

Parasitic Bronchitis, Husk or Hoose.

ED. MED. AND SURG. REPORTER:—

Judging by what has come under my notice since the pleuro-pneumonia scare last spring, I am inclined to think that the farmers and dairymen throughout the State, with few exceptions, class all bronchial affections of cattle under the head of pleuro-pneumonia; and I am sorry to say that I think, in many cases, they are supported by amateur veterinarians, who find it very convenient, when called to see a case they do not understand, to go with the tide and say the animal has (the fashionable disease) pleuro-pneumonia. This is accepted without cavil, and the "Vet" saves his reputation and the farmer loses a cow or calf, as the case may be; and yet he is satisfied, as he knows nothing about the diseases of cattle, and especially diseases that are very seldom discussed through the agricultural journals.

Therefore, as we very seldom see an article in any of the journals on parasitic bronchitis, husk or hoose, I will call your attention to a few cases, not with the view of introducing anything new, as I think the disease is, or at least should be, understood by veterinarians. But I am afraid amateurs know very little, if anything, about it. On October 28th a friend of mine was called to see some calves that were sick at Mr. John Heinly's place, in Northampton County, and on arriving at Mr. Heinly's he found one in a dying condition and five others very sick, and was told that two had died before he was called on; the third died that afternoon, October 28th, and the doctor made a post-mortem and brought a portion of one of the lungs to me that evening. I found, on examining it, that the disease was parasitic bronchitis, husk or hoose, and advised him to give to the remainder of the calves that were sick half a drachm of turpentine and half a drachm of linseed oil, three times a day; and should any of the cows become affected, to give them one drachm of the turpentine and oil at a dose, and in either case make the animal inhale turpentine. This can be done by putting some bran in a bucket and then pouring a small quantity of turpentine in it, and over all boiling water. The bucket must be held under the animal's nose, so that the steam may penetrate, not only to the frontal sinuses, but to the trachea.

There were two died after that, one on November 12th and the other on the 20th. This case, the doctor writes me, had been improving very fast, until Mr. Heinly turned the animal out in the meadow that the calves were in when first taken sick, and it died in about a week afterward. There was one cow affected with the disease, but she recovered.

Cause.—As the name indicates, this disease is caused by parasites in the bronchial tubes, and as a general thing affects calves that are pastured on low, marshy meadows. Prof. Gamgee, in speaking of this disease in sheep, says (page 365) the strongylus filaria is a worm from one to two and a half inches in length, the male smaller than the female, and yellowish, whereas the latter is white: and on page 366 says, in calves similar parasites abound, under certain circumstances, in the respiratory organs. The strongylus vitutorum (Reed) or strongylus micrurus (Mehlis).

Clater, by Armatage, says, page 508, this disease most commonly attacks young lambs and calves during the first year, and generally seizes them while at grass in the summer: and he further says, in some dry summers it has carried off large numbers: then again, on page 509, he says, worms in horned cattle, we believe, are not very common.

Dr. Tellor, in "Diseases of Live Stock" (a very good work published in this city), defines it, page 339, as a disease caused by the irritation in the windpipe, bronchial tubes and lungs of a parasitic worm called the strongylus, and also tells us that the disease is very fatal to sheep in many parts of this country. Prof. Law, in the "Farmers' Veterinary Adviser," page 100, says the calf, horse, ass and mule have the strongylus micrurus of from one and a half to three inches long; and on pages 101 and 102, describes the symptoms very minutely, and offers very sound advice as to prevention; and on page 103, says the symptoms in the sheep goat and camel are the exact counterpart of those in the calf. As to prevention, he says all the measures advised for the calf will apply equally well here. Prof. Williams, in speaking of hoose in calves, says, page 660: this disease very closely resembles that in lambs, and is caused by a parasite termed the strongylus micrurus. Cobbold, page 335, says, the nematodes of the ruminants are both numerous in and destructive to their bearers, those infesting the lungs being productive of a parasitic bronchitis, termed husk or hoose, and in cattle the strongylus micrurus is particularly fatal to calves, while the strongylus filaria attacks sheep and lambs.

Symptoms.—The following are some of the most prominent symptoms: Animal dull and losing flesh and strength, frequent grinding of the teeth, and if compelled to move will lament or groan; breathing labored, cough harsh, and sometimes in the act of coughing the animal will discharge large flakes of matter, in which on examining it, we can very often detect bunches or nests of parasites; as the disease advances the breathing becomes more labored and sometimes catching, as if the animal was suffocating.

Post-mortem.—On examining the lungs we will find they differ very much in different cases; in some we will find both very much inflamed, and

in others one inflamed and the other apparently healthy. But in all cases, on making an incision through the lung and exposing the small bronchial tubes, we will find them filled with mucus containing more or less of the parasites, and on exposing the large tubes we will very often find bunches or nests coiled together like a rope and completely closing the tubes. They are from one to three inches long, and about as thick as the fine white wrapping yarn used by grocers and druggists. On opening the trachea (windpipe) and examining the mucous membrane, we will, in the majority of cases, find them adhering to it; in fact, I don't think there is any part of the respiratory organs exempt, and in support of this assertion, I will cite a case. Dr. Cobbold says, page 335, about the middle of October, 1875, he received from Mr. George Farrow, of Durham, a fresh and characteristic specimen of diseased lungs, in which the bronchia was swarming with filaria, and in reference to the case itself, Mr. Farrow informed him, by letter, that the calf was one of a herd of seven.

Now, in conclusion, permit me to repeat that I think this disease is met with quite frequently, but not understood by amateurs, and if this brief sketch will be the means of causing them to investigate, not only this, but all other diseases of cattle, I will feel amply rewarded for the time spent in writing it. JAMES MCCOART, V.S.

317 *North 22d Street, Philadelphia.*

Post-partum Intra-uterine Injections.

ED. MED. AND SURG. REPORTER:—

As you some time ago solicited contributions from country practitioners, I send you a brief account of a case, which, if of sufficient interest, please give a place in the columns of the REPORTER.

On the 22d of October, 1877, was called to Mrs. K., a small, thin woman of highly nervous organization, about twenty years of age, in her first labor. Found the head presenting in the first position, pains slight, and os dilated about the size of a five-cent piece. The pains continuing slight and ineffectual, prescribed an anodyne, to be taken at bedtime, and left, to return in the morning unless required sooner. On the following morning found my patient had slept some during the night, the labor had progressed satisfactorily, and, the os being pretty well dilated, and everything favorable, ruptured the membranes, when expulsive pains soon came on, recurring vigorously every three or five minutes for nearly an hour, when unmistakable signs of exhaustion coming on, gave chloroform, applied the long forceps and extracted a well-developed female child, weighing a little over eight pounds. Considerable hemorrhage followed the expulsion of the placenta, but this soon ceased by the uterus becoming firmly contracted. She rallied pretty well, but soon complained of severe hypogastric pain. At five P.M., five hours after delivery, found my patient unrelieved of the pain, restless, with a pulse at 130, temperature 102, skin dry, tongue coated and vaginal discharge scanty. Introduced the catheter and drew off about three ounces of turbid urine, had hot fomentations applied to the abdomen and vulva, and gave a teaspoonful of the following mixture every three hours:—

℞.	Tinct. aconite rad,	f. ℥ ss
	Spir. æth. dulc.,	f. ℥ ij
	Liq. ammon. acetat.,	f. ℥ xiiiss
	Quin. sulph.,	℈ j. M.

Also ¼ gr. of morphine every two or three hours, for the pain.

October 23d. Patient passed a restless night; pulse the same, temperature 103; continued the treatment, and gave intra-uterine injections of Nichol's solution of carbolic acid and hot water, (℥ j to the pint) every four hours. 6 P.M., temperature 102¼°, pulse and other symptoms the same.

October 24th. Patient passed a better night, probably from fifteen grains each of chloral hydrat. and bromide potassium. Pulse 120, skin hot, temperature 103½° and considerable tenderness over abdomen. Treatment continued. 6 P.M.; tenderness of abdomen about the same, as were the other symptoms, with the exception of the temperature, which was reduced to 102¾°, which I attributed to the recurrence to the use of the intra-uterine injections, which had been suspended during the night.

From this time on, for several days, with varying symptoms but gradual improvement, under supporting treatment and quinia, with intra-uterine injections three times a day (which seemed alone to have any effect in controlling the temperature, as on their cessation it would invariably rise), up to the third of November, when I was summoned in great haste to my patient, who had passed through a severe chill and was now in a violent reaction, with a temperature of 107¾°. Resorted at once to an intra-uterine douche, and repeated every two hours, which, as before, always had the effect of steadily reducing the temperature, so that by the following morning it was at 102¼° and patient more comfortable, and from this time on recovery, though very slow and tedious, was uninterrupted. Since the chill the internal treatment consisted mostly of quinine and the most concentrated nourishment—given as freely as could be taken. The interesting features to me in this case were, first, the extreme high temperature (even for so short a time) not proving fatal, and second, the unmistakably rapid effect of the intra-uterine douches in reducing the temperature, especially the remarkably high temperature of 107¾°. The patient always expressed herself as much relieved by the injections, and was frequently comforted by a short sleep. F. E. CLARK, M.D.,

Visiting Physician to S. R. Smith Infirmary and Child's Hospital, *West New Brighton, Staten Island, N. Y., Dec.* 23, 1879.

Injurious Marital Relations.

ED. MED. AND SURG. REPORTER:—

I have just finished reading the twenty-ninth chapter of Dr. William Goodell's "Lessons in Gynecology," and it has so pleased me that I write you to say that it cannot fail to win for Dr. Goodell the utmost esteem from the profession. There is not, and never will be, written another

such a chapter in all of our medical literature. It is valuable beyond measure. The physician who does not carry with him that lesson is void of certain elements which make him thoroughly what he professes to be. It should be read by every medical man and the lesson it inculcates constantly borne in mind. If the publication of this letter would bring the lesson before a single practitioner I hope you will publish it, for it would be doing a good work. Respectfully,

Cedar Rapids, Iowa. H. L. GREEN, M.D.

[The chapter to which our correspondent refers is entitled "The Sexual Relations as Causes of Uterine Disorders," and it certainly lays bare, with startling fidelity, some far too common abuses of married life.—ED. REPORTER.]

NEWS AND MISCELLANY.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service; October 1, 1879 to December 31, 1879.

Bailhache, P. H., Surgeon. Relieved from duty port of New York and ordered to Philadelphia temporarily; thence to resume his duties as member of the National Board of Health. Oct. 25th, 1879.

Hutton, W. H. H., Surgeon. Relieved from duty port of New Orleans and ordered to Detroit. November 1st, 1879.

Fessenden, C. S. D., Surgeon. Relieved from duty, port of Portland, Maine, and ordered to New York. October 25th, 1879.

Doering, E. J., Surgeon. Relieved from duty port of Philadelphia and ordered to Portland, Maine. October 25th, 1879.

Austin, H. W., Assistant Surgeon. Relieved from duty port of Key West and ordered to New Orleans. November 1, 1879.

Stoner, G. W., Assistant Surgeon. Relieved from duty port of Buffalo and ordered to Philadelphia. October 25th 1879.

Fisher, J. C., Assistant Surgeon. Detailed as chairman of Board for the Physical Examination of Candidates for Promotion in the Revenue Marine Service, November 20, 1879. Granted leave of absence for nine days from December 19th, 1879. December 17th, 1879.

Godfrey, John, Assistant Surgeon. Ordered to proceed to New Orleans, for temporary duty during illness of Surgeon Austin. December 29th, 1879.

Goldsborough, C. B.. Assistant Surgeon, Detailed as Recorder of Board for the Physical Examination of Candidates for Promotion in the Revenue Marine Service. November 20th, 1879.

White, R., Jr., Assistant Surgeon. Ordered to Buffalo. October 24th, 1879. Orders to Buffalo revoked; ordered to report to Surgeon Fessenden, New York, for duty. November 12th, 1879.

Irwin, Fairfax, Assistant Surgeon. Upon expiration of leave of absence to proceed to Charleston, S. C. October 31st, 1879.

Glazier, W. C. W., Assistant Surgeon. Relieved from duty port of Charleston, S. C., and ordered to Key West, Florida, October 31st, 1879.

Cook, H. B., Assistant Surgeon. Relieved from duty port of Pensacola, Florida, and ordered to Buffalo, New York, December 1st, 1879.

O'Connor, F. J., Assistant Surgeon. Ordered to Philadelphia for temporary duty. November 10th, 1879. Ordered to Buffalo, New York, for temporary duty. November 12th, 1879. When relieved by Assistant Surgeon Cooke, to rejoin his proper station. December 9th, 1879.

Porter, F. D., Assistant Surgeon. Assigned to temporary charge at Detroit Marine Hospital. October 25th, 1879. When relieved by Surgeon Hutton to proceed to Chicago and report for duty to Surgeon Miller. December 17th, 1879.

PROMOTIONS.

Austin, H. W., Surgeon, Promoted to be Surgeon, from November 1st, 1879. November 3d, 1879.

Gassaway, J. M., Passed Assistant Surgeon. Promoted to be Passed Assistant Surgeon. December 12th, 1879.

Smith, Henry, Passed Assistant Surgeon. Promoted to be Passed Assistant Surgeon. December 12th, 1879.

Stoner, G. W., Passed Assistant Surgeon. Promoted to be Passed Assistant Surgeon. December 12th, 1879.

RESIGNATIONS.

Ellinwood, C. N., Surgeon. Resignation accepted; to take effect October 2d, 1879. October 2d, 1879.

Brown, J. A., Surgeon. Resignation accepted; to take effect November 1, 1879. November 7th, 1879.

Dana, C. L., Assistant Surgeon. Resignation accepted; to take effect November 15th, 1879. November 11th, 1879.

Vivisection in Germany.

Richard Wagner, the musician, has written an open letter against vivisection. He tells physiologists to "look into the eyes" of the animals they torture, and he is sure they will drop their instruments.

Professor Zollner, of Leipsic, has expressed his belief that vivisectionists are to a large extent responsible for "Nihilism in religion and morality;" and he counsels them, instead of continuing their evil practices, to study "animal magnetism." Notwithstanding these authoritative utterances, the German public are not, apparently, inclined to call for the kind of legislation which has been adopted in England. At a meeting held in Leipsic last month, Herr von Weber denounced the medical profession as guilty of great cruelty. In these days, he declared, doctors regarded their patients rather as "materials for experiments" than as persons to be helped, so that hospitals had been virtually transformed into laboratories. The only effect, however, of the orator's indignant eloquence, was, that three cheers were almost unanimously given for a distinguished physician against whom he directed his most violent attacks.

Results of Sanitary Science.

Statistics have recently been published showing that as sanitary science has progressed in Great Britain, the prevalence of disease and the rate of mortality have correspondingly decreased. In all large towns public opinion makes the adoption of sanitary measures a chief feature of local administration. The decrease of the death-rate during the twelve years, 1867–1878, was very marked in the chief cities of England and Scotland. Comparing the six years, 1867–1872, with the six years, 1873–1878, it appears that the average death-rate per 1000 persons, in Liverpool, decreased from 31.1 in the former period to 28.1 in the latter, being a gain of 9 per cent.; in Manchester, from 31.2 to 29.1, or nearly 7 per cent.; in Leeds, from 27.3 to 25.6, or 6 per cent.; in London, from 23.6 to 22.7, or less than 4 per cent.; in Birmingham there was a slight increase from 24.2 to 24.9. Still more favorable results were realized in Scotland. In Edinburg the rate of mortality fell off from 25.8 during 1867–72 to 22.1 during 1873-8, a gain of 14 per cent.; in Dundee, from 27.7 to 24.4, or 12 per cent.; in Glasgow, from 30.6 to 27.3, or nearly 11 per cent.; in Aberdeen, from 22.5 to 21.7, or 3½ per cent. It has been estimated that, had the average death-rate of 1867–72, continued during 1873–78, the number of deaths during the latter period, in twelve leading towns of Great Britain, would have been 61,000 greater than it actually was. In other words, the decrease in the death-rate, which has been attributed chiefly to the advancement of sanitary science, resulted during six years in saving, or rather prolonging, 61,000 lives in 12 cities.

Prof. Tyndall's Theory of Contagion.

This distinguished physicist is a bold dabbler in medical theories. His last assertion is that diseases are propagated, not by effluvia or sewer gas, but by solid particles discharged into the atmosphere by currents of air or gas. This he proved by the following experiment: He cut up a piece of steak, steeped in water, heated it at a little above the temperature of the blood, then strained off the liquid; in a short time this fluid became turbid, and when examined through a microscope was found to be swarming with living organisms; by the application of heat these were killed, and when the solution was filtered he obtained a perfectly pure liquid, which, if kept free from particles of dust, would remain pure for an unlimited period; but if a fly were to dip its leg in fluid containing living organisms, and then into the pure liquid, the whole would be swarming with animalcula in forty-eight hours.

Diphtheria in Russia.

Diphtheria has been for several years a veritable scourge in Russia. Under date of January 8th, a St. Petersburg despatch to Reuter's Telegram says: "The local Red Cross Society of Kharkoff, in view of the terrible distress prevailing in the province through the ravages of diphtheria, have formed medical and sanitary detachments to assist the Government to combat the disease." A learned physician, Dr. Speranski, states that whereas the death rate by smallpox in Russia is 25.5 out of every 100 attacked; by scarlatina, 25; by measles, 12.8; by whooping cough, 5.1; by typhus, 11.2; the percentages of mortality by diphtheria reaches the alarming figure of 40.

A Monument to Galvani.

Bologna has erected to the memory of the illustrious Galvani, the great discoverer of animal electricity, a monument, in which he appears in the act of touching with two different metals the lumbar nerves of a vivisected frog. It will be remembered that it was accidentally, and in a course of a series of vivisections of frogs conducted for quite another purpose, that Galvani observed the twitching of the muscles of the limb of the frog as it swung backward and forward; and the bare sciatic nerve touching the metal, the first inkling came to him of the discovery of electricity which is known by his name.

Compressed Nitrous Oxide as an Anæsthetic.

Foreign journals inform us that M. Paul Bert's new method for producing anæsthesia—nitrous oxide used under pressure—has been introduced into the Paris hospitals. Last month, M. Léon Labbé performed seven surgical operations, of which the duration varied from five to thirty-two minutes, in the movable chamber put up at the Lariboisière Hospital by Dr. Fontaine, for the surgical and medical employment of compressed air. As in the operations already performed at the medico-pneumatic establishment in the Rue Chateaudun by M. Péan, the success of this new anæsthetic method was complete.

Veterinary Board of Health.

We learn from the *Observador Medico*, of December, that they are trying, in Mexico, to establish a veterinary board of health, and to pass a law compelling the owners and others having charge of domestic animals to report to the same, at once, any enzoötic or epizoötic disease. The board is then forthwith to appoint a commission of veterinary surgeons, whose duty it shall be to investigate the nature of the disease, and to take such measures as may seem best calculated to prevent its further progress. It is likewise to prohibit the sale of meat, milk, hides, etc., of the animals attacked.

Early Maturity.

In Valencia there is a female child, twenty months old, who presents all signs of puberty. She is 86 cm. (34 inches) in height, and walks without support; the labia majora are large, the mons veneris is covered with an abundance of hair, she menstruates regularly—a leucorrhœal discharge preceding each period—her mammæ are well developed, and the nipples notably large.

Personal.

—Dr. John Buchanan, the diploma vendor of this city, is again in trouble, this time about an alleged abortion case.

—A marble statue to Bourgelat, founder of the Veterinary School of Paris, was unveiled in that city, October 30th. When will veterinary science receive like recognition in this country?

—The death of Miss Mary Stanley, sister of Dean Stanley, took place last month. The event merits record in these pages, because of her eminent services in practical philanthropy, and especially as she was the founder of the "Flower Missions," which have, through her example, cheered the wards of so many hospitals.

—The well-known Professor of Experimental Physics at Cambridge, England, James Clerk Maxwell, M.D., LL.D., F.R.S., died November 5th. Professor Maxwell was an accomplished mathematician and successful investigator in physics. His "Treatise on Electricity and Magnetism," and "Theory of Heat," are his best known works.

—The oldest member of the Paris Académie de Médecine, M. Chevalier, has recently died, in the eighty-seventh year of his age, having been elected in 1824. He had been also a Professor of the École de Pharmacie, and was editor of the *Journal de Pharmacie* for many years. He was one of the most active of the members of the Conseil de Salubrité, and few men have done more than him in originating improvements in public hygiene, especially as regards alimentary substances.

Items.

—Paul Boyton has injured his health to such an extent, by his reckless habit of floating up and down rivers, as though he were a regular crocodile, that he is forced to go to Florida for the winter.

—George Eliot's physician told her she must never again attempt literary work, and an exchange says, we want that doctor to come right to this country and take care of Joaquin Miller, and several other literary gentlemen.

—The discovery that about forty bodies have been stolen, for dissecting purposes, from Oakwood Cemetery, at Richmond, Va., since cold weather set in, has caused much excitement in that city. The exhumed corpses are supposed to be those of colored persons chiefly.

OBITUARY NOTICES.

—Dr. David L. Eigenbrodt, of New York City, died January 30th, aged 69 years. He had for some years retired from active professional duties.

—Dr. J. B. Alolcott, Surgeon General of Wisconsin and a member of the Board of Managers of the National Soldiers' Home, died of pneumonia, in Milwaukee, on Monday night.

—Dr. R. C. Thomas, of Bowling Green, Ky., died very suddenly, at the bedside of one of his patients, December 28th, 1879. He was an esteemed physician, and highly respected in the community of his residence.

—The late Dr. Joseph S. Longshore, of this city, whose death occurred recently, founded the Female Medical College of Pennsylvania, in 1850, now known as the Women's Medical College of Pennsylvania. He drafted the charter which was passed by the Legislature, and devoted his time and money to securing, furnishing and fitting up the college building. It is to be regretted that he did not see clearly the advantage of embracing his labors strictly within the lines of scientific medicine.

QUERIES AND REPLIES.

Quinine in Diphtheria.

Mr. Editor:—I have been treating, with the best of results, quite a number of cases of diphtheria and croup by the insufflation of quinine. Will some of my medical brethren try it and report results? N. S. Read.

—*Dr. I. W. J. of Texas*, writes:—I should like to have the opinion of the readers of the Reporter as to blistering in pneumonia. In their experience is it beneficial? When is it indicated? etc.

We shall be pleased to have the opinion of a number of readers on this important point.

—*Dr. I. W. of O.*—No index to first series of Half Yearly Compendium was printed.

MARRIAGES.

MUHLENBERG—FELL.—In Wilkesbarre, Pa., December 23d, by Rev. F. B. Hodge, Dr. H. E. Muhlenberg, of Lancaster, Pa., and Emma J. Fell, of Wilkesbarre.

NEWTON—SNYDER.—December 25, at the parsonage in Paulsboro, N. J., by Rev. G. R. Snyder, Samuel E. Newton, M.D., and Miss Mary A. Snyder, daughter of the officiating clergyman.

PETERS—COOKE.—On November 27th, 1879, at his residence, Storm Lake, Iowa, by Rev. Joshua Cooke, Dr. Goodwin E. Peters, of Wabash, Ind., and Miss Nelly M. Cooke, daughter of the officiating clergyman.

DEATHS.

BERNACKI.—On Monday, December 29, Dr. C. W. Bernacki, of New York.

CONE.—In New York, December 20, 1879, Dr. Robert C. Cone, aged 68 years and 8 months.

EIGENBRODT.—On Saturday, January 3, David L. Eigenbrodt, M.D., at his residence, No. 127 West Thirteenth street, New York.

ELMER.—At Bridgeton, N. J., November 28, Macomb K., son of Dr. William Elmer, of Bridgeton.

GROSS.—In Camden, N. J., on the 5th instant, Leon Coates, twin son of Dr. C. B. and Fannie A. Gross, aged 13 months and 15 days.

GRYDER.—On December 25, in Fulton township, Lancaster county, Pa., Walter E., son of Dr. M. R. and Anna M. Gryder.

HARPER.—In Cincinnati, Ohio, on the evening of Saturday, December 20, Dr. T. L. Harper.

MORRISON.—At Marietta, Ga., December 31, in his 27th year, Sterling Morrison, M.D., son of the Rev. A. M. Morrison, of Philadelphia.

OTTO.—In this city, on Sunday, 4th inst., Matilda, daughter of the late John C. Otto, M.D.

WILLIAMS.—In Cincinnati, Ohio, Mrs. Mary Williams, beloved wife of Dr. Thomas Williams, at the residence of her daughter, Mrs. Charles L. Mills, 114 Broadway, after a protracted illness, aged 66 years.